

**IN THE UNITED STATES RECEIVING OFFICE**

<b>PCT/US2004/001329</b>	<b>16.01.2004 16 January 2004</b>	<b>17.01.2003 17 January 2003</b>
<b>International Application Number</b>	<b>International Filing Date</b>	<b>International Earliest Priority Date</b>

**TITLE OF INVENTION:** HAPLOTYPe ANALYSIS**APPLICANT(S) FOR EO/DO:** The Trustees of Boston University**INVENTOR(S)/APPLICANT(S) FOR US:** Charles R. Cantor and Chunming Ding**U.S.S.N. 10/542,043****CERTIFICATE OF MAILING**

I hereby certify that this correspondence, on the date shown below, is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner of Patents, Box 1450, Alexandria, VA 22313-1450 .

Date: *July 26, 2006*

  
Tina-Michelle Pittsley

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir/Madam:

**INFORMATION DISCLOSURE STATEMENT**

In accordance with the provisions of 37 C.F.R. §1.56, 1.97, and 1.98, Applicants wish to bring to the Examiner's attention the following references, References 1-36 cited in the attached Form PTO/SB/08 a and b.

**REMARKS**

In accordance with the provisions of 37 C.F.R. §1.97, this statement is being filed:

- X (1) within three (3) months of the Filing Date or before the mailing date of the First Office Action on the merits; or

- (2) within three months of the mailing date of the PCT International Search Report; or
- (3) after the period defined in (1) but before the mailing date of a **Final Rejection** or **Notice of Allowance**, and the requisite Certification or fee under Rule 1.17(p), namely **\$180.00**, is included herein; or
- (4) after the mailing date of a **Final Rejection** or **Notice of Allowance** but before the payment of the **Issue Fee**, and the requisite Certification, petition, and petition fee are included herein.

X

A copy of the International Search Report is enclosed herewith.

X

It is respectfully requested that each of the documents shown on the attached form(s) PTO/SB/08a and b be made of record in this application.

      

Copies of these documents (CHECK ONE):

are enclosed herewith that have not been previously submitted; or

      

have been cited in the parent application, and are thus not being resubmitted herein.

X

Pursuant to 37 C.F.R. §1.98, copies of issued U.S. patents listed on the attached form PTO/SB/08, if any, are no longer required and therefore are not enclosed. These documents can be found in the U.S. PTO issued patents database.

#### FEE AUTHORIZATION

The Commissioner is authorized to charge fee deficiencies or credit overpayments associated with this submission to the Nixon Peabody LLP Deposit Account No. 19-2380.

Date: July 26, 2006

Respectfully submitted,



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Substitute for form 1449A/PTO				<i>Complete if Known</i>			
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				Application Number	10/542,043		
				Filing Date	January 16, 2004		
				First Named Inventor	Cantor et al.		
				Art Unit	To Be Assigned		
				Examiner Name	To Be Assigned		
Sheet	1	of	3	Attorney Docket Number	701586/53653		
<b>U.S. PATENT DOCUMENTS</b>							
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number - Kind Code <sup>2</sup> ( <i>if known</i> )					
1	US	2002/0081598 A1	US-2002/0081598 A1	06-27-2002	Evans et al.		
	US-						
	US-						
	US-						
	US-						
<b>FOREIGN PATENT DOCUMENTS</b>							
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> ( <i>if known</i> )				
<b>OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS</b>							
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					T <sup>2</sup>
2	BARNES, W.M., <i>Proc. Natl. Acad. Sci. USA</i> 91:2216-2220 (1994)						
3	CLARK, A.G., <i>Mol. Biol. Evol.</i> 7(2):111-122 (1990)						
4	COLLINS et al., <i>Science</i> 278(5343):1580-1581 (1997)						
5	CONNER et al., <i>Proc. Natl. Acad. Sci. USA</i> 80:278-282 (1983)						
6	DALY et al., <i>Nature Genetics</i> 29:229-232 (2001)						
7	DING et al., <i>PNAS</i> 100(13):7449-7453 (2003)						
8	DOUGLAS et al., <i>Nature Genetics</i> 28:361-364 (2001)						
Examiner Signature		Date Considered					

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at 222.uspto.gov or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO				<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				Application Number	10/542,043
				Filing Date	January 16, 2004
				First Named Inventor	Cantor et al.
				Group Art Unit	To Be Assigned
				Examiner Name	To Be Assigned
Sheet	2	of	3	Attorney Docket Number	701586/53653
<b>OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS</b>					
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
	9	DRYSDALE et al., <i>Proc. Natl. Acad. Sci. USA</i> 97(19):10483-10488 (2000)			
	10	EVANS et al, <i>Science</i> 286:487-491 (1999)			
	11	GABRIEL et al., <i>Science</i> 296:2225-2229 (2002)			
	12	GRUPE et al., <i>Science</i> 292:1915-1918 (2001)			
	13	HIRSCHHORN et al., <i>Genetics in Medicine</i> 4(2):45-61 (2002)			
	14	HODGE et al., <i>Nature Genetics</i> 21:360-361 (1999)			
	15	JEFFREYS et al., <i>Cell</i> 60:473-485 (1990)			
	16	JEFFREYS et al., <i>Nucleic Acids Res.</i> 16(23):10953-10971 (1988)			
	17	JUDSON et al., <i>Pharmacogenomics</i> 1(1):15-26 (2000)			
	18	KRUGLYAK, L., <i>Nature Genetics</i> 22:139-144 (1999)			
	19	KRYNETSKI & EVANS, <i>Am. J. Hum. Genet.</i> 63:11-16 (1998)			
	20	MARTIN et al., <i>Genomics</i> 63:7-12 (2000)			
	21	MICHALATOS-BELOIN et al., <i>Nucleic Acids Res.</i> 24(23):4841-4843 (1996)			
	22	NICKERSON et al., <i>Proc. Natl. Acad. Sci. USA</i> 87:8923-8927 (1990)			
Examiner Signature				Date Considered	

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Sheet	3	of	3	Attorney Docket Number	701586/53653
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	23	ORITA et al., <i>Proc. Natl. Acad. Sci. USA</i> 86:2766-2770 (1989)			
	24	PAPADOPOULOS et al., <i>Nature Genetics</i> 11:99-102 (1995)			
	25	PRIOR et al., <i>Human Mutation</i> 5:263-268 (1995)			
	26	REIN et al., <i>Nucleic Acids Res.</i> 26(10):2255-2264 (1998)			
	27	ROSS et al., <i>Nature Biotechnology</i> 16:1347-1351 (1998)			
	28	RUANO et al., <i>Nucleic Acids Res.</i> 17(20):8392 (1989)			
	29	RUANO et al., <i>Nucleic Acids Res.</i> 19(24):6877-6882 (1991)			
	30	RUANO et al., <i>Proc. Natl. Acad. Sci. USA</i> 87:6296-6300 (1990)			
	31	SHIELDS& HARRIS, <i>J. Clin. Oncol.</i> 18(11):2309-2315 (2000)			
	32	STEPHENS et al., <i>Am. J. Hum. Genet.</i> 46:1149-1155 (1990)			
	33	STEPHENS et al., <i>Am. J. Hum. Genet.</i> 68:978-989 (2001)			
	34	TEMPLETON et al., <i>Genetics</i> 120:1145-1154 (1988)			
	35	WOOLLEY et al., <i>Nature Biotechnology</i> 18:760-763 (2000)			
	36	ZHANG et al., <i>Am. J. Hum. Genet.</i> 69:904-914 (2001)			
Examiner Signature				Date Considered	

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